

and possibly *Phaneropleuron*, approached more closely to *Ceratodus* than did *Dipterus* and its allies. The last-mentioned Dipnoi, on the contrary, seemed to represent a divergent and terminal branch of the Dipnoan stem and to include the most highly specialized examples of the group.

This memoir will be published entire in the Society's 'Transactions.'

The following papers were read:—

1. On the Classification of the *Thyrididæ*—a Family of the Lepidoptera Phalænæ. By Sir GEORGE F. HAMPSON, Bart., F.Z.S.

[Received April 8, 1897.]

The *Thyrididæ*, of which a classification is here given, is a small family of Lepidoptera closely related to the ancestral stock of the *Pyrallidæ*, in which family they are most nearly allied to the Indian *Simethistis* and to two Australian species, *asuridia*, Butl., and *magnifica*, Meyr., for which a genus requires to be made. Most of the genera have veins 2 to 11 of the fore wing arising from the cell, and vein 8 of the hind wing approximated to 7 at or beyond the end of the cell, not anastomosing with 7 as in the majority of the *Pyrallidæ*. These characters show a very generalized type of structure, but as specialized developments we have the abortion of the maxillary palpi and of the vein in the submedian fold of the hind wing, which prevents their being regarded as the ancestors of the *Pyrallidæ*, in all of which the latter character is retained and also the former in all except a specialized subfamily, the *Chrysaugineæ*.

From the *Thyrididæ* were derived the *Drepanidæ*, closely related to them and differing principally in the more complicated neurulation of the subcostal veins of the fore wing and in vein 1 *a* of the hind wing being absent or short, these again giving rise to the small Oriental day-flying family *Callidulidæ*; the whole group of families, which includes also the *Pterophoridaæ* and *Orneodidæ*, having sprung from the *Tineid* stock near the ancestors of the *Sesiadæ* and *Zygænidæ*.

The *Thyrididæ* are almost entirely confined to the Tropical zone; the genus *Thyris* itself is Palæarctic and Nearctic, but of the rest of the family only two or three species spread into the Southern States, a few more to Japan and N. Asia, and one to New Zealand. The ancestral form of the family would have short porrect palpi, all the veins of the fore wing from the cell, the hind wing with vein 5 from the middle of the discocellulars and vein 8 free; with such a form *Morova* conforms except that veins 8 and 9 of the fore wing are stalked. From this ancestral type have developed forms of abnormal shape and appearance culminating in *Hepaliodes*—forms with the subcostal neurulation of the fore wing modified in various ways, such as *Begumia*, *Plagiosella*, and *Pycnosoma*, and forms with the discocellulars aborted, such as *Glanycus* and *Thyris*.

In aid of the preparation of this paper and one on the subfamily *Chrysauginae* I have to thank the Hon. Walter Rothschild for the loan of the whole of his material to work out and classify; Mr. Herbert Druce for the loan of many species from the Neotropical region; Mr. W. Schaus for the gift of many species from the same region; Madame Ragonot for the loan of types described by her husband; Mr. Meyrick for help with the Australasian species; Mr. Elwes for the gift of types described by Mr. Meyrick from the Malayan region; Dr. Standinger for the loan of types described by Möschler and Pagenstecher; and Prof. Poulton for the loan of Oxford Museum types. As in my other papers on groups of *Pyrilidæ* in the 'Proceedings' for 1896 and the 'Transactions of the Entomological Society' for the same year, types of species in the British Museum are marked with a †; species I have examined but which are not in the Museum, with a *; whilst species I have been unable to see and the classification of which is doubtful, are enumerated at the end of the genera. When it is stated "Types in Coll. Rothschild and B.M.," the type is in Mr. Rothschild's collection, a co-type in the British Museum.

Family THYRIDIDÆ.

Palpi slender; maxillary palpi absent; proboscis present. Fore wing with vein 1 *a* forming a fork with 1 *b*; 5 from or from near lower angle of cell; 6 to 11 usually from the cell. Hind wing with vein 1 *c* absent; 5 usually from near lower angle of cell; 8 approximated to 7 at upper angle of cell, or approximated to or anastomosing with it after the angle.

Larvæ Pyraliform, with five pairs of prolegs, in the case of many species being internal feeders.

Key to the Genera.

- | | |
|---|-------------------------------|
| A. Both wings with the cell open | 1. <i>Thyris</i> , p. 606. |
| B. Fore wing with the cell closed, hind wing with it open. | [p. 608. |
| <i>a</i> . Fore wing with veins 7, 8 stalked | 4. <i>Glanycus</i> , [p. 607. |
| <i>b</i> . Fore wing with veins 7, 8 from the cell. | [p. 607. |
| <i>a'</i> . Palpi with the 3rd joint upturned | 3. <i>Hyperthyris</i> , |
| <i>b'</i> . Palpi with the 3rd joint porrect | 2. <i>Herimba</i> , p. 607. |
| C. Both wings with the cell closed. | |
| <i>a</i> . Hind wing with vein 5 from near lower angle of cell. | |
| <i>a'</i> . Fore wing with veins 7, 8 and 9, 10 stalked. | [p. 610. |
| <i>a''</i> . Palpi with the 3rd joint long and porrect | 7. <i>Pycnosoma</i> , |
| <i>b''</i> . Palpi with the 3rd joint short and upturned ... | 8. <i>Dirva</i> , p. 611. |
| <i>b'</i> . Fore wing with veins 7, 8 stalked; 9 and 10 from cell. | [p. 625. |
| <i>a''</i> . Palpi upturned | 15. <i>Plagiosella</i> , |
| <i>b''</i> . Palpi porrect | 17. <i>Camptochilus</i> , |
| <i>c'</i> . Fore wing with veins 7, 8 from cell; 9, 10 stalked. | [p. 627. |
| <i>a''</i> . Palpi upturned; fore wing with the apex not produced | 9. <i>Mathoris</i> , |
| <i>b''</i> . Palpi porrect; fore wing with the apex extremely produced | [p. 611. |
| <i>d'</i> . Fore wing with vein 8 anastomosing with 9, which is given off from 10 to form an areole ... | 22. <i>Vadata</i> , p. 630. |
| | 16. <i>Beguma</i> , p. 626 |

- e'*. Fore wing with veins 8, 9 stalked, 7 and 10 from cell.
- a*². Palpi upturned. [p. 613.]
- a*³. Hind wing with the apex produced and acute. 12. *Camadena*,
- b*³. Hind wing with the apex not produced 13. *Hypolamprus*,
- b*². Palpi porrect; fore wing with vein 5 from below [p. 614.]
- middle of discocellulars 24. *Meskea*, p. 631.
- f*. Fore wing with veins 6 to 11 from cell.
- a*². Fore wing with veins 9 and 10 from a point well before angle of cell.
- a*³. Both wings with the outer margin angled at middle 10. *Macrogonia*,
- b*³. Both wings with the outer margin evenly curved..... 11. *Striglina*, [p. 612.]
- b*². Fore wing with veins 9 and 10 from close to angle of cell. [p. 612.]
- a*³. Palpi upturned.
- a*⁴. Hind wing with the outer margin nearly evenly curved.
- a*⁵. Fore wing with the costa not excised at middle 14. *Rhodoneura*,
- b*⁵. Fore wing with the costa excised at middle [p. 615.]
- b*⁴. Hind wing with the outer margin much excurved at middle; the build stout 6. *Herdonia*,
5. *Dysodia*, p. 608. [p. 610.]
- b*³. Palpi porrect.
- a*⁴. Palpi extending about twice the length of head, the 3rd joint long 18. *Hexeris*, p. 627.
- b*⁴. Palpi extending about the length of head, the 3rd joint moderate.
- a*⁵. Hind wing with the costa excised before apex, which is produced upwards into a lobe..... 19. *Hepialodes*,
- b*⁵. Hind wing with the costa not excised towards apex. [p. 628.]
- a*⁶. Hind wing with the apex produced and falcate [p. 628.]
- b*⁶. Hind wing with the apex not produced. 20. *Belonoptera*,
- c*⁴. Palpi hardly extending beyond the frons... 21. *Risama*, p. 629.
23. *Draconia*, [p. 630.]
- b*. Hind wing with vein 5 from middle of discocellulars.
- a'*. Palpi upturned 25. *Addæa*, p. 632.
- b'*. Palpi porrect 26. *Morova*, p. 633.

Genus THYRIS.

Thyris, Lasp. Ill. Mag. ii. p. 39 (1803), non descr.

Thyris, Ochs. Schmett. Eur. ii. p. 115 (1808).

Proboscis well developed; palpi upturned, the 2nd joint clothed with rough hair and reaching vertex of head, the 3rd acute; head clothed with rough hair; antennæ of male thickened by appressed serrations; tibiæ clothed with rough hair; abdomen of male with long tubular anal tuft. Fore wing with the costa slightly arched at base and towards apex, the outer margin excised below apex and excurved at middle; veins 3, 4, 5 well separated at origin; the cell open; 6, 7, 8, 9, 10 from upper angle. Hind wing with the outer margin excised below apex and excurved at middle; the cell open; veins 3, 4 from a point; 5 from above angle; 6, 7 from a point, 8 approximated to the cell to near their origin.

Fig. 1.

*Thyris fenestrella*, ♂. $\frac{3}{2}$.

- Type.* (1) *THYRIS FENESTRELLA*, Scop. Ent. Carn. p. 217. Europe.
Sphinx pyralidiformis, Hübn. Sph. 16.
- (2) *THYRIS DIAPHANA*, Staud. Cat. p. 19. S. Europe.
 „ *vitrina*, H.-S. ii. p. 81, f. 11 (nec Boisd.).
- (3) *THYRIS MACULATA*, Harris, Cat., Am. Journ. Sci. xxxvi. p. 313. U.S.A.
 †*Sagalassa perspicua*, Wlk. viii. 7.
- (4) †*THYRIS USITATA*, Butl. A. M. N. H. 1879, ii. p. 367. Japan.
- (5) *THYRIS LUGUBRIS*, Boisd. Spec. Gén. pl. 14. f. 11. U.S.A.
 „ *sepulchralis*, Boisd. Guér. Icon. pl. 84. 2. f. 1.

Genus *HERIMBA*.

Herimba, Moore, Lep. Atk. p. 20 (1879).

Palpi upturned, the 2nd joint not reaching vertex of head, the 3rd porrect; antennæ of male ciliated; tibiæ hairy. Fore wing with vein 3 from before angle of cell; 4, 5 from angle; 6 from below upper angle; 7, 8 from upper angle; 9, 10 from close together before the angle. Hind wing with veins 3, 4, 5 from angle of cell which is open; 6, 7 from upper angle; 8 well separated from 7.

Fig. 2.

*Herimba atkinsoni*, ♂. $\frac{1}{2}$. (From Moths Ind. vol. i.)

- Type.* *HERIMBA ATKINSONI*, Moore, Lep. Atk. p. 21, pl. 2. f. 3.
 N.E. India; Burma.

Genus *HYPERTHYRIS*.

Hyperthyris, Leech, Trans. Ent. Soc. 1889, p. 121.

Palpi upturned, the 2nd joint clothed with hair and reaching vertex of head, the 3rd naked and acute; antennæ of male minutely ciliated; tibiæ clothed with long hair. Fore wing with

the costa and outer margin evenly curved; vein 3 from before angle of cell; 4, 5 from angle; the cell closed; 6 from below upper angle; 7, 8, 9 from angle. Hind wing with the cell open; veins 4, 5 and 6, 7 given off near the margin; 8 approximated to the cell at middle.

Fig. 3.



Hyperthyris aperta, ♂. 1. (From Moths Ind. vol. i.)

Type. **HYPERTHYRIS APERTA*, Leech, Trans. Ent. Soc. 1889, p. 122, pl. vii. f. 7. China; Sikkim.

Genus GLANYCUS.

Glanycus, Wlk. iii. 634 (1855).

Palpi upturned, thickly scaled, and hardly reaching vertex of head; antennæ of male fasciculate; tibiæ clothed with rough hair; build stout. Fore wing long and narrow; the outer margin very obliquely curved and excised towards outer angle; veins 3, 4, 5 from angle of cell which is closed; 6 from upper angle; 7, 8 stalked; 9, 10, 11 free. Hind wing with the cell open; veins 4, 5 and 6, 7 given off very near the margin; 8 anastomosing with the cell at middle.

Fig. 4.



Glanycus insolitus, ♀. 1. (From Moths Ind. vol. i.)

SECT. I. Hind wing with the anal angle truncate.

Type. (1)†*GLANYCUS INSOLITUS*, Wlk. iii. 635; Butl. Ill. Het. v. pl. 84. f. 12 (♀). N.E. India; Borneo.

SECT. II. Hind wing with the anal angle produced and lobed.

(2)†*GLANYCUS TRICOLOR*, Moore, Lep. Atk. p. 38; Waterh. Aid, ii. pl. 131. f. 1. N.E. India.

Genus DYSODIA.

Dysodia, Clem. Pr. Ac. N. Sc. Phil. 1860, p. 349.

Platythyris, Gr. & Rob. Ann. N. Y. Lyc. viii. p. 361 (1867).

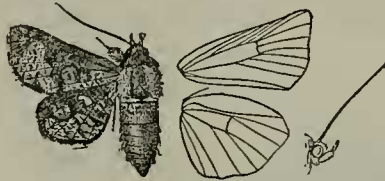
Varnia, Wlk. Journ. Linn. Soc. vii. p. 69 (1864).

Pachythyris, Feld. Reis. Nov., Lep. pl. 75. f. 1 (1867).

Palpi upturned, the 2nd joint thickly scaled and reaching vertex

of head, the 3rd naked; antennæ almost simple in both sexes; femora and tibiæ clothed with very long hair; build stout. Fore wing with the outer margin excurved at middle; vein 3 from before angle of cell; 4, 5 from angle; 6 from below upper angle; 7, 8, 9, 10 from angle. Hind wing with the outer margin excurved at middle; veins 3, 4, 5 from angle of cell; 6, 7 from upper angle; 8 approximated to cell at upper angle.

Fig. 5.

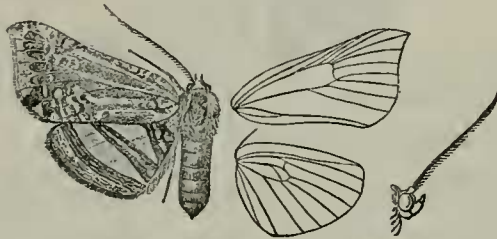
*Dysodia ignita*, ♂. †. (From Moths Ind. vol. i.)

- Type.* (1) *DYSODIA VITRINA*, Boisd. Mon. Zyg. p. 19, pl. 1. f. 5. U.S.A.
 (2) *DYSODIA OCVLATANA*, Clemens, Pr. Ac. N. Sc. Phil. 1860, p. 349. U.S.A.; Panama.
 † *Varnia plena*, Wlk. xxxiii. 826.
Platythyris fasciata, Gr. & R. Ann. N. Y. Lyc. viii. pl. 13. ff. 4, 5.
Thyris montana, H. Edwards, Pr. Cal. Ac. Sc. v. p. 413.
Varnia aurea, Pag. Iris, v. p. 32.
 (3) † *DYSODIA INTERMEDIA*, Wlk. xxxiii. 827. Natal.
 † *Varnia crassa*, Wlk. xxxiii. 827.
 (4) *DYSODIA SPECULIFERA*, Sepp, Surinam, iii. pl. 135. Florida; Tropical America.
Varnia cequalis, Wlk. xxxiii. 825.
 „ *flagrata*, Wlk. xxxiii. 826.
Pachythyris thyridina, Feld. Reis. Nov. pl. 117. f. 20.
 (5) † *DYSODIA IGNITA*, Wlk. xxxiii. 825. India; Ceylon;
Varnia inaequalis, Wlk. xxxiii. 828. Sumatra; Java.
Pachythyris rajah, Boisd. Lép. Hét. p. 492.
 „ *siculoides*, Feld. Reis. Nov. pl. 75. f. 1.
Varnia fenestrata, Moore, P. Z. S. 1881, p. 376.
 „ *ypsiloides*, Pag. Iris, v. p. 35.
 Subsp. 1.
Varnia miniata, Wlk. Journ. Linn. Soc. vii. p. 69. N.E. India.
 Subsp. 2.
Varnia incudigera, Pag. Iris, v. p. 33. Java.
 Subsp. 3.
 † *Varnia taprobana*, Moore, Lep. Ceyl. iii. p. 67, pl. 151. f. 7. Ceylon.
 (6) * *DYSODIA ALBIFURCA*, Hmps. Moths Ind. i. p. 369. Sikhim.
 (7) † *DYSODIA VIRIDATRIX*, Wlk. xv. 1777. India; Ceylon.
Eutelia siccifolia, Moore, P. Z. S. 1881, p. 375.

Genus *HERDONIA*.*Herdonia*, Wlk. xix. 963 (1859).

Palpi short and porrect; antennæ with short uniseriate branches in male; tibiæ nearly smooth. Fore wing with the costa arched at base and towards apex, slightly excised at middle; vein 3 from well before angle of cell; 4, 5 from angle; 6 from below upper angle; 7, 8, 9, 10 from near upper angle; 11 free. Hind wing with veins 3, 4, 5 widely separated at origin; 6, 7 from upper angle, 8 approximated to 7 after end of cell; a forked veinlet in cell.

Fig. 6.

*Herdonia osacesalis*, ♂. †. (From Moths Ind. vol. i.)

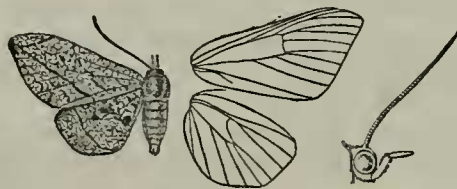
Type. (1)†*HERDONIA OSACESALIS*, Wlk. xix. 964; Feld. Reis. Nov. pl. 134. f. 4. China; N.E. India; Burma.

(2)†*HERDONIA BOTYDANA*, Wlk. xxxii. 522. Brazil.

Genus *PYCNOSOMA*, nov.

Palpi with the 2nd joint obliquely upturned, the 3rd long and porrect; antennæ thickened and flattened; tibiæ smoothly scaled. Fore wing with vein 3 from before angle of cell; 4, 5 from angle; 6 from below upper angle; 7, 8 and 9, 10 stalked. Hind wing with vein 3 from before angle of cell; 4, 5 from angle; 6, 7 stalked; the outer margin excurved at middle.

Fig. 7.

*Pycnosoma angulata*, ♂. †.

Type. †*PYCNOSOMA ANGULATA*, n. sp.

♀. Head, thorax, and abdomen yellow suffused with rufous; wings golden yellow closely striated with rufous. Fore wing with oblique postmedial line sharply angled below costa, met by an oblique streak from apex and terminating at middle of inner margin. Hind wing with large dark discocellular spot followed

by hyaline and brown spots and with brown spots between it and inner margin; an obliquely curved postmedial rufous line terminating close to anal angle.

Hab. Espiritu Santo, Brazil. *Exp.* 32 mm.

Genus DIXOA.

Dixoa, Hmps. Moths Ind. i. p. 355 (1892).

Palpi upturned, slender, and hardly reaching vertex of head; antennæ ciliated; tibiæ smoothly scaled. Fore wing with vein 3 from before angle of cell; 4, 5 from angle; 6 from below upper angle; 7, 8 and 9, 10 stalked. Hind wing with vein 3 from before angle of cell; 5 from just above angle; 6 from below upper angle.

Fig. 8.



Dixoa albatalis, ♂. †. (From Moths Ind. vol. i.)

Type. †DIXOA ALBATALIS, Swinh. P. Z. S. 1889, p. 422, pl. 44. ff. 1, 2.

W. India.

Genus MATHORIS.

Mathoris, Guen. Ann. Soc. Ent. Fr. 1877, p. 282.

Palpi upturned and reaching vertex of head, the 3rd joint short; frons with a rounded prominence; antennæ somewhat thickened; mid tibiæ with a tuft of hair on outer side from base. Fore wing with vein 3 from before angle of cell; 4, 5 from angle; 6, 7 from below upper angle; 8 from angle; 9, 10 stalked. Hind wing with veins 3, 4, 5 from close to angle of cell; 6, 7 from upper angle, 7 anastomosing with 8.

Fig. 9.



Mathoris vocata, ♂. ‡.

Type. (1)†MATHORIS VOCATA, Wlk. xxii. 662.

Brazil.

†*Cambogia procurata*, Wlk. xxii. 672.

Siculodes roseola, Feld. Reis. Nov. pl. 134. f. 5.

Mathoris crepuscula, Guen. Ann. Soc. Ent. Fr. 1877, p. 283.

(2)*MATHORIS MEDIARIA, Wlk. xx. 229.

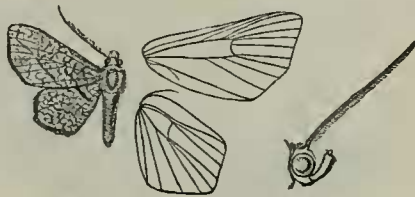
Brazil.

Genus *MACROGONIA*.

Macrogonia, H.-S. Samml. aussereur. Schmett. p. 62 (1850).

Palpi upturned, reaching vertex of head; antennæ of male strongly ciliated; tibiæ clothed with long hair. Fore wing with the outer margin slightly angled at middle; vein 3 from before angle of cell; 4, 5 from angle; 6 from below upper angle; 7, 8 from angle; 9, 10 from well before angle. Hind wing with the outer margin angled at middle; veins 3, 4, 5 from angle of cell; 6, 7 from upper angle.

Fig. 10.



Macrogonia igniaria, ♂ $\frac{1}{2}$.

Type. *MACROGONIA IGNIARIA*, H.-S. Samml. aussereur. Schmett. p. 62, f. 315. Brazil.

Genus *STRIGLINA*.

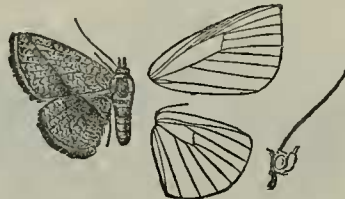
Striglina, Guen. Ann. Soc. Ent. Fr. 1877, p. 283.

Tanyodes, Möschl. Surinam, iv. p. 25 (1881).

Sonagara, Moore, Lep. Atk. p. 179 (1882).

Palpi upturned, the 2nd joint thickly scaled and reaching vertex of head, the 3rd short and naked; frons with a tuft of hair; antennæ of male somewhat thickened and flattened; tibiæ fringed with long hair. Fore wing with vein 3 from before angle of cell;

Fig. 11.



Striglina scitaria, ♂ $\frac{1}{2}$. (From Moths Ind. vol. i.)

4, 5 from angle; 6 from below upper angle; 7, 8 from angle; 9, 10 from well before angle. Hind wing with veins 3, 4, 5 from angle of cell; 6, 7 from upper angle.

(1)†*STRIGLINA XANTHOPERA*, n. sp.

♂. Head rufous; collar yellow; thorax and abdomen pinkish brown: wings pinkish brown thickly speckled with yellow; fore

wing with a patch of bright yellow on costa before apex; a yellow line outwardly edged by fuscous from apex of fore wing to middle of inner margin of hind wing.

Hab. Rio Janeiro. *Exp.* 28 mm.

(2)†STRIGLINA PYRRHATA, Wlk. xxxv. 1575. Australia.

„ *australina*, Guen. Ann. Soc. Ent. Fr. 1877, p. 284.

(3)†STRIGLINA OCHRACEA, Möschl. Surinam, iv. p. 25.

Surinam; Amazons.

Type. (4)†STRIGLINA SCITARIA, Wlk. xxvi. 1488; Moore, Lep. Ceyl. iii. pl. 175. ff. 1, 1 a. Amur; Japan;

†*Anisodes pyrinata*, Wlk. xxvi. 1582. Formosa; India, Ceylon

†*Thermesia reticulata*, Wlk. xxxiii. 1062. & Burma; Andamans;

Laginia reticulata, Wlk. xxxv. 1560. Borneo; New Guinea;

Striglina lineola, Guen. Ann. Soc. Solomons; Australia;

Ent. Fr. 1877, p. 284. Fiji.

Homodes thermesioides, Snell. Tijds. v. Ent. 1877, p. 28.

Sonagara strigosa, Moore, Lep. Atk. p. 180.

Azasia navigatorum, Feld. Reis. Nov. pl. 117. f. 4.

†*Sonagara superior*, Butl. A. M. N. H. (5) xx. p. 433.

† „ *vialis*, Moore, P. Z. S. 1883, p. 27, pl. 6. f. 9 (var.).

† „ *strigipennis*, Moore, Lep. Atk. p. 180.

Timandra cancellata, Christ. Neue Lep. Amur, p. 23.

(5) STRIGLINA GLAREOLA, Feld. Reis. Nov. pl. 134. f. 11. India;

† „ *decussata*, Moore, P. Z. S. 1883, Ceylon; Burma; p. 27, pl. 6. f. 8. Andamans; Borneo;

† „ *bivittata*, Moore, P. Z. S. 1883, Java; Australia. p. 27, pl. 6. f. 7 (var.).

„ *sordida*, Pag. Iris, v. p. 47.

†*Siculodes platyntis*, Meyr. Trans. Ent. Soc. 1894, p. 479 (var.).

Striglina duplicifimbria, Warr. A. M. N. H. (6) xviii. p. 272.

Auctorum.

Orthogramma rufitibia, Feld. Reis. Nov. pl. 117. f. 1. Brazil.

Striglina hyalospila, Lower, Tr. R. Soc. S. Austral. xviii. p. 87.

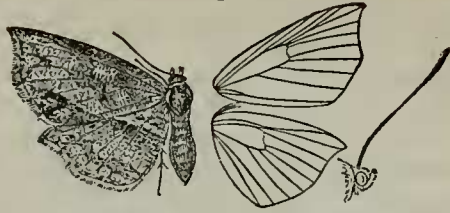
Queensland.

Genus CAMADENA.

Camadena, Moore, Lep. Atk. p. 214 (1888).

Palpi upturned, reaching vertex of head; antennæ simple; hind tibiæ of male extremely long and swollen, the terminal pair of spurs short, a tuft of long hair from base, and the tarsus very short. Fore wing very acute and produced at apex, the costa straight; veins 3, 4, 5 widely separated at origin; 8, 9 stalked. Hind wing with the outer margin produced to a long point at vein 7; veins 3, 4, 5 widely separated at origin; 6, 7 from upper angle.

Fig. 12.



Camadena vespertilionis, ♀. $\frac{1}{2}$. (From Moths Ind. vol. i.)

Type. CAMADENA VESPERTILIONIS, Moore, Lep. Atk. p. 214, pl. vii. f. 13. Sikkim.

Caustoloma acutipennis, Moore, Lep. Atk. p. 230.

Genus HYPOLAMPRUS.

Hypolamprus, Hmspn. Moths Ind. i. p. 364 (1892).

Palpi slight, upturned, and reaching just above vertex of head; antennæ thickened and flattened; tibiæ smoothly scaled. Fore wing with vein 3 from before angle of cell; 4, 5 well separated at origin; 6 from below upper angle; 7 from angle; 8, 9 stalked. Hind wing with vein 3 from before angle of cell; 4, 5 from angle; 6, 7 from upper angle.

Fig. 13.



Hypolamprus striatalis, ♂. $\frac{1}{2}$. (From Moths Ind. vol. i.)

SECT. I. Hind wing with the outer margin straight.

- (1)†HYPOLAMPRUS TRIFASCIALIS, Moore, P. Z. S. 1877, p. 614, pl. 60. f. 9. Burma; Andamans.

SECT. II. Hind wing with the outer margin excised towards anal angle.

- (2)†HYPOLAMPRUS ANGULALIS, Moore, Lep. Atk. p. 214. E. Himalayas; Burma.
 (3) HYPOLAMPRUS SUBROSEALIS, Leech, Entom. 1889, p. 66, pl. iv. f. 14. China; N.W. Himalayas; Ceylon; Pulo Laut.
 (4)†HYPOLAMPRUS PALLESCENS, n. sp.

♀. Whitish, almost wholly suffused with pale reddish brown. Fore wing with a slight mottled appearance, especially below middle of cell. Hind wing with traces of ante- and postmedial whitish bands. Underside of fore wing striated with black, forming an oblique band from below apex to above middle of inner

margin; a white subapical spot with a black speck on it; hind wing thickly striated with black.

Hab. Mysol (*Wallace*); West Australia. *Exp.* 28 mm.

(5) *HYPOLAMPRUS NINNIUSALIS*, Wlk. xix. 894. Brazil.

(6)**HYPOLAMPRUS COSTIScripta*, Warr. A. M. N. H. (6) xvii. p. 209. Fergusson I., N. Guinea; Queensland.

(7)† *HYPOLAMPRUS PERATOPIS*, n. sp.

♂. Head, thorax, and abdomen pale ferruginous. Fore wing whitish, almost wholly suffused and striated with ferruginous; the costal area ferruginous, with small pale quadrate patches; antemedial and medial ferruginous bands; a black-centred white subapical spot. Hind wing whitish, thickly striated with ferruginous and with traces of antemedial, postmedial, and submarginal bands, the last irregular and ending on the margin at vein 2. Underside of fore wing with cupreous and black markings in cell and beyond upper angle.

Hab. S.E. Borneo (*Doherty*); Amboina; Fergusson Isl. *Exp.* 22 mm.

SECT. III. Hind wing with the outer margin evenly curved.

(8)† *HYPOLAMPRUS STRIATALIS*, Swinh. P. Z. S. 1885, p. 875. India; Ceylon.

(9) *HYPOLAMPRUS OBSCURALIS*, Hmps. Moths Ind. i. p. 365. W. Africa; Himalayas; Assam.

(10)**HYPOLAMPRUS HEMICYCLA*, Meyr. Trans. Ent. Soc. 1886, p. 216. Fiji.

(11) *HYPOLAMPRUS LOBULATUS*, Moore, Lep. Atk. p. 214, pl. 7. f. 12. N.E. India.

(12) *HYPOLAMPRUS STYLOPHORA*, Swinh. A. M. N. H. (6) xv. p. 17. N.E. India; Ceylon.

(13)**HYPOLAMPRUS ATROSTRIATUS*, Hmps. Moths Ind. i. p. 365. Assam.

(14) *HYPOLAMPRUS FIMBRIATA*, Warr. A. M. N. H. (6) xvii. p. 207. Sikhim; Assam.

Genus RHODONEURA.

Rhodoneura, Guen. Ur. & Phal. ii. pl. i. f. 8 (1857).

Brixia, Wlk. xix. 889 (1859).

Calindœa, Wlk. xxvii. 87 (1863).

Osea, Wlk. Journ. Linn. Soc. vii. p. 73 (1864).

Cancea, Wlk. Journ. Linn. Soc. vii. p. 73.

Banisia, Wlk. Journ. Linn. Soc. vii. p. 77.

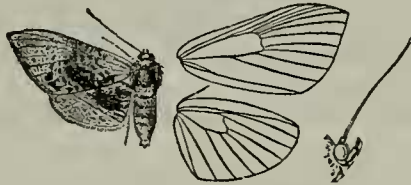
Iza, Wlk. xxxii. 521 (1865).

Pharambara, Wlk. xxxiv. 1274 (1865).

- Opula*, Wlk. Pr. N. H. S. Glasg. i. p. 371 (1869).
Siculodes, Guen. Ann. Soc. Ent. Fr. 1877, p. 289.
Microsca, Butl. Ill. Het. iii. p. 71 (1879).
Pyrinioides, Butl. Trans. Ent. Soc. 1881, p. 199.
Durdara, Moore, Lep. Atk. p. 176 (1882).
Letchena, Moore, Lep. Ceyl. iii. p. 257 (1887).
Sericophora, Christ. Rom. Mém. vi. p. 636 (1892).

Palpi slight, upturned, and reaching above vertex of head, the 2nd joint thickly scaled, the 3rd naked; frons rounded; tibiæ smoothly scaled. Fore wing with the apex somewhat produced and acute; vein 3 from near angle of cell; 4, 5 from angle; 6, 7, 8, 9, 10 from near upper angle. Hind wing with vein 3 from near angle of cell; 4, 5 from angle; 6, 7 from upper angle.

Fig. 14.



Rhodoneura acaciussalis, ♂. ♀. (From Moths Ind. vol. i.)

SECT. I. Antennæ of male bipectinate, of female serrate.

- (1)†RHODONEURA MUNDA, Hmps. Moths Ind. i. p. 364. N.E. India.
 (2) RHODONEURA PLANA, Swinh. Cat. Het. Mus. Oxon. ined. Aru.

SECT. II. Antennæ of male somewhat thickened.

A. Mid tibiæ of male fringed on outer side with spinous hair; hind tibiæ with a brush of long hair from base.

- (3) RHODONEURA SETIFERA, Swinh. A. M. N. H. (6) xvi. p. 298. Assam.

B. Tibiæ smoothly scaled.

a. (*Sericophora*.) Fore wing with the outer margin oblique and crenulate from vein 5 to outer angle.

- (4)†RHODONEURA HYPOXANTHA, Hmps. Moths Ind. i. p. 364. Himalayas; Assam; Burma.
 (5)*RHODONEURA TRISTIS, Hmps. Moths Ind. i. p. 364. Sikkim.
 (6)*RHODONEURA GUTTATA, Christ. Rom. Mem. vi. p. 636, pl. xiv. f. 14. Amur.

b. Hind wing with the outer margin straight, the inner area with a fold and tuft of long hair below.

- (7)*RHODONEURA CERVINALIS, Pag. Iris, v. p. 82. Peru.

c. Hind wing with the outer margin concave from apex to anal angle.

a^1 . Fore wing with the apex not produced and acute.

a^2 . Hind wing with the anal angle not produced.

(8) RHODONEURA DORILUSALIS, Wlk. xix. 890. Borneo;
Pyralis imbutalis, Wlk. xxxiv. 1524. Pulo Laut; Mysol.

(9)*RHODONEURA CORTICINA, Pag. Iris, v. p. 112. Borneo.

(10)*RHODONEURA TRITROPHA, Swinh. A. M. N. H. (6) xv. p. 17.
Assam.

(11)†RHODONEURA TERMINALIS, Wlk. xxxii. 522. Haiti.

(12)*RHODONEURA LEUCONOTULA, Pag. Iris, v. p. 80, pl. i. f. 15.
Panama.

b^2 . Hing wing produced to a point at anal angle.

(13)*RHODONEURA FUMATILIS, Pag. Iris, v. p. 81. Panama.

b^1 . Fore wing with the apex produced and acute.

(14)*RHODONEURA TIGRIDULA, Guen. Ann. Soc. Ent. Fr. 1877,
p. 292, & Ur. & Phal. ii. Siculides, f. 7. Cayenne.

d. Outer margin of hind wing slightly excised below apex.

a^1 . Hind wing with the costa excised beyond middle.

(15)*RHODONEURA NIGROPUNCTULA, Pag. Iris, v. p. 109.
Dar-es-Salaam, E. Africa; Natal.
Rhodoneura seriata, Warr. Nov. Zool. iv. p. 20.

b^1 . Hind wing with the costa not excised.

(16) RHODONEURA BUFARETA, Hmpsn. Moths Ind. i. p. 363.
Sikhim.

(17)†RHODONEURA BRACTEATA, Hmpsn. Moths Ind. i. p. 363.
Assam; Andamans.

(18)†RHODONEURA INTIMALIS, Moore, Lep. Atk. p. 213.
Assam; Ceylon; Java.
Pharambara compunctalis, Warr. A. M. N. H. (6) xvii. p. 208.
„ *ulterior*, Warr. A. M. N. H. (6) xvii. p. 212 (var.).

(19)*RHODONEURA BULLIFERA, Warr. Nov. Zool. iii. p. 343. Assam.

(20)*RHODONEURA MOLLIS, Warr. Nov. Zool. iii. p. 341. Sikhim.

(21)†RHODONEURA STENOSOMA, n. sp.

♂. Palpi with the third joint long and reaching well above vertex of head; abdomen very long.

Grey; abdomen with some dark marks on dorsum; wings sparsely irrorated with black scales and closely striated with fine dark striæ; traces of five bands on fore wing and three on hind

wing; fore wing with whitish mark below apex with dark speck on it, more prominent on underside. Underside of hind wing with some dark brown patches.

Hab. Ceylon (*Green*); Padang, Malay Pen.; Bálí (*Doherty*).
Exp. 28 mm. Type in B.M.

e. Both wings with the outer margin evenly rounded.

- (22) RHODONEURA MYETÆA, Drury, Exot. Ins. W. Indies; India
ii. pl. 2. f. 3. Andamans; Borneo; Celebes.

Thermesia fenestrina, Feld. Reis. Nov. pl. 117. f. 2 (var.).

Striglina clathrula, Guen. Ann. Soc. Ent. Fr. 1877, p. 285.

†*Durdara fenestrata*, Moore, P. Z. S. 1883, p. 27, pl. vi. f. 6.

†*Microsea plagifera*, Butl. Trans. Ent. Soc. 1886, p. 420 (var.).

†*Durdara ovifera*, Butl. P. Z. S. 1892, p. 129, pl. vi. f. 7.

- (23)†RHODONEURA MYRSUSALIS, Wlk. xix. 892. Porto Rico;

†*Letchena elaralis*, Wlk. xix. 901. Brazil; Natal; India;

Pyrallis idalialis, Wlk. xix. 903. Ceylon; Burma; Borneo.

Siculodes cinereola, Feld. Reis. Nov. pl. 134. f. 8.

Striglina scallula, Guen. Ann. Soc. Ent. Fr. 1877, p. 287.

„ var. *immaculata*, Möschl. Abh. Senck. Ges.
xvi. p. 123.

Durdara pyruliata, Moore, Lep. Atk. p. 177.

„ *lobata*, Moore, Lep. Atk. p. 177.

† „ *zonula*, Swinh. P. Z. S. 1885, p. 469, pl. 28. f. 12.

Striglina radiata, Pag. Iris, v. p. 41.

- (24) RHODONEURA LOCUSALIS, Wlk. xix. 903. Ceylon.

†*Pyrallis thyrallis*, Wlk. xxxiv. 1234; Moore, Lep. Ceyl. iii.
pl. 178. f. 10.

- (25)†RHODONEURA POLYSTICTALIS, n. sp.

♀. Orange-red; wings orange-yellow, striated with double scarlet waved lines forming obscure bands. Fore wing with the costal area reddish, with four or five black marks on costa; both wings with the marginal area scarlet irrorated and striated with black. Underside of fore wing with the cell suffused with purplish and irrorated with black.

Hab. Mysol (*Wallace*), Jobie (*Doherty*). *Exp.* 14 mm. Types in B.M. & Coll. Rothschild.

- (26) RHODONEURA AMETHYSTEAE, Feld. Reis. Nov. pl. 134. f. 6.

Brazil.

- (27) RHODONEURA SEMITESSELLATA, Wlk. Journ. Linn. Soc. vii.
p. 73. Burma; Borneo; Australia.

†*Pyrallis semitessellalis*, Wlk. xxxiv. 1246.

Siculodes ignotalis, Rob. Tijd. v. Ent. xxxiv. p. 329 & xxxv.
pl. 6. f. 7.

- (28)†RHODONEURA IMPLETALIS, Wlk. Pr. N. H. S. Glasg. i. p. 371.
W. Africa.

- (29)**RHODONEURA WIRNEBURGALIS*, Keferstein, J.B. Acad. Erfurt, new ser. vol. vi. 1870, p. 16, f. 9. Madagascar.
Siculodes plagula, Guen. Ann. Soc. Ent. Fr. 1877, p. 300.
- (30)†*RHODONEURA NEBULOSA*, Warr. Trans. Ent. Soc. 1889, p. 261. Brazil.
Siculodes rotundula, Pag. Iris, v. p. 107, pl. 1. f. 7.
- (31)†*RHODONEURA HEDILALIS*, Wlk. xix. 895; Druce, Biol. Centr.-Am., Het. pl. 59. f. 7. Brazil.
Siculodes amethystina, Feld. Reis. Nov. pl. 134. f. 6.
- (32)†*RHODONEURA MICRAGRAPHALIS*, n. sp.
♂. Pale red-brown variegated with dark ferruginous red; wings thickly reticulated with fine brown lines. Fore wing with series of short ferruginous streaks on the costa; indistinct irregular antemedial and medial ferruginous bands defined by dark lines; an obliquely curved postmedial fine dark line, forking towards outer angle; a ferruginous band across apical area defined by fine dark lines. Hind wing with dark marks connecting the reticulation in places, more prominent on underside.
Hab. Sierra Leone (*Clements*). Types in Coll. Schaus & B.M.
- (33) *RHODONEURA SUBCOSTALIS*, Hmps. Moths Ind. i. p. 362. N.W. Himalayas; Assam.
,, *pralanis*, Swinh. A. M. N. H. (6) xvi. p. 298.
- (34)**RHODONEURA OLIGOSTICTA*, Hmps. Moths Ind. i. p. 362. Sikkim.
- (35)**RHODONEURA ATRICLATHRATA*, Warr. Nov. Zool. iii. p. 340. Assam.
- (36)†*RHODONEURA ALTERNATA*, Moore, Lep. Atk. p. 212. N.E. India; Borneo.
Banisia bifimbriata, Warr. Nov. Zool. iv. p. 20.
- (37)†*RHODONEURA RETICULATA*, Moore, Lep. Atk. p. 212. N.E. India.
- (38)**RHODONEURA CATENULA*, Pag. Iris, v. p. 73. Cameroons.
- (39) *RHODONEURA DISSIMULANS*, Warr. A. M. N. H. (6) xvii. p. 227. Assam; Borneo; Queensland.
Banisia ordinaria, Warr. A. M. N. H. (6) xviii. p. 228.
- (40)**RHODONEURA NITIDA*, Pag. Nass. Jahrb. f. Naturf. 1888, p. 182. Borneo; Amboina.
- (41) *RHODONEURA TETRAGONATA*, Wlk. Journ. Linn. Soc. vii. p. 78. N.E. India; Borneo; Sumatra.
Rhodoneura quadripunctula, Pag. Iris, v. p. 100.
†*Pharambara vinosa*, Butl. P. Z. S. 1892, p. 130, pl. vi. f. 8.
Rhodoneura jubralis, Swinh. A. M. N. H. (6) xvi. p. 299.

- (42)**RHODONEURA FENESTRATA*, Pag. Nass. Jahr. f. Nat. 1888, p. 183, no. 559, & Iris, v. pl. 1. f. 2. Amboina.
- (43)**RHODONEURA FULVICEPS*, Feld. Reis. Nov. pl. 134. f. 12. Brazil.
- (44)**RHODONEURA LUNULA*, Feld. Reis. Nov. pl. 134. f. 1. Brazil.
- (45)†*RHODONEURA TRIGONIPHORA*, n. sp.
- ♂. Red-brown with a golden tinge; wings closely reticulated with rufous. Fore wing with three greyish triangular patches on the costa, and the apex grey; several irregular transverse lines, of which the most prominent are two postmedial lines widely separated at costa and conjoined just above inner margin; a submarginal line terminating below apex. Hind wing with two white discocellular specks; numerous reticulated lines; a dark spot above middle of inner margin.
- Hab.* São Paulo, Brazil. *Exp.* 24 mm.
- (46)**RHODONEURA ALBIPUNCTULA*, Pag. Iris, v. p. 76. Peru.
- (47)**RHODONEURA GRACILIS*, Möschl. Surinam, iv. p. 24, pl. 18. f. 49. Surinam.
- (48)**RHODONEURA FERRUGINEA*, Pag. Iris, v. p. 79. Peru.
- (49)†*RHODONEURA MICACEALIS*, Wlk. xxxiv. 1275. Ceylon; Mysol.
- (50)†*RHODONEURA CUPREA*, Butl. A. M. N. H. (5) x. p. 233. New Britain.
- (51) *RHODONEURA THIASTORALIS*, Wlk. xix. 893. Assam;
Malayan subregion and Neotropical region.
- † „ *rhodosticta*, Swinh. A. M. N. H. (6) xvi. p. 298.
- (52) *RHODONEURA ASTRODORA*, Meyr. Trans. Ent. Soc. 1897, p. 91. Amboina.
- (53) *RHODONEURA FALLAX*, Warr. A. M. N. H. (6) xviii. p. 229. Dili; N. Guinea.
- (54)**RHODONEURA PUNCTA*, Feld. Reis. Nov. pl. 134. f. 7. Brazil.
- (55)†*RHODONEURA FERROFUSA*, Hmps. Moths Ind. i. p. 362. Bombay.
- (56) *RHODONEURA MELANOSTIGMALIS*, Swinh. A. M. N. H. (6) xvi. p. 298. Assam.
- (57) *RHODONEURA SEMIPERFORATA*, Warr. A. M. N. H. (6) xvii. p. 211. Assam.
- (58)**RHODONEURA CURVILINEA*, Warr. A. M. N. H. (6) xviii. p. 229. Assam.
- (59)†*RHODONEURA EXUSTA*, Butl. Ill. Het. iii. p. 71, pl. 58. f. 8. Japan; Sikhim.
- † *Microscia ardens*, Butl. Ill. Het. iii. p. 71, pl. 58. f. 9.
„ *exusta*, var. *erecta*, Leech, Entom. 1889, p. 66, pl. 4. f. 3.

(60)*RHODONEURA HEBRA, Swinh. A.M. N. H. (6) xv. p. 18. Assam.

(61)†RHODONEURA ATRISTRIGULALIS, Hmps. Moths Ind. iv.
p. 480. Bhután.

(62)†RHODONEURA AUREA, Butl. Trans. Ent. Soc. 1881, p. 200.
Japan.

(63)†RHODONEURA AURATA, Butl. A. M. N. H. (5) x. p. 233.
Australia ; New Britain.
Siculodes hydreutis, Meyr. Pr. Linn. Soc. N. S. W. 1886,
p. 253.

(64)†RHODONEURA ATOMOSALIS, n. sp.

Rufous ; wings pale, thickly and uniformly chequered with dark
rufous spots ; fore wing with the costa dark, with nine pure white
specks on it ; underside of fore wing with two dark-edged white
discocellular spots.

Hab. Java ; Mysol. *Exp.* 26 mm.

(65)†RHODONEURA UNIFORMIS, Hmps. Moths Ind. i. p. 362.
Andamans.

(66) RHODONEURA EMBLICALIS, Moore, Lep. Atk. p. 213.
N.E. India.

†*Pharambara sphoraria*, Swinh. Trans. Ent. Soc. 1892, p. 18,
pl. i. f. 11.

(67) RHODONEURA CRYPSIRIA, Meyr. Trans. Ent. Soc. 1887, p. 201.
Australia.

†*Pharambara reticulata*, Butl. Trans. Ent. Soc. 1886, p. 420
(preocc.).

(68)*RHODONEURA CARNEOLA, Feld. Reis. Nov. pl. 134. f. 10.
Brazil,

(69)*RHODONEURA APICIALIS, Pag. Iris, v. p. 70, pl. 1. f. 16.
Peru.

(70)*RHODONEURA ERYTHRINALIS, Pag. Iris, v. p. 72, pl. 1. f. 17.
Brazil.

(71)*RHODONEURA FLAVULA, Pag. Iris, v. p. 111, pl. 1. f. 9.
W. Africa.

(72)†RHODONEURA DISPARALIS, Hmps. Ill. Het. ix. p. 72, pl. 171.
f. 11. Ceylon.

(73)†RHODONEURA ATRIPUNCTALIS, Wlk. xxxiv. 1523.
Nilgiris ; Java.

(74)*RHODONEURA BIPUNCTA, Hmps. Moths Ind. i. p. 360.
Burma.

(75) RHODONEURA GLAPHYRALIS, Hmps. Moths Ind. i. p. 359.
N.E. India.

- (76)†RHODONEURA PALLIDA, Butl. Ill. Het. iii. p. 71, pl. 58. f. 7.
Japan; N.E. India.
Pharambara obliquistrigalis, Warr. A. M. N. H. (6) xvii.
p. 210.

- (77)*RHODONEURA STRIOLA, Feld. Reis. Nov. pl. 134. f. 15.
Amboina.

- (78)†RHODONEURA LATIZONALIS, n. sp.

Pale ochreous brown. Fore wing thickly striated with fine brown lines; a black speck at lower angle of cell; a subapical white patch defined by a fine black line, irrorated with black and with two black specks on it. Hind wings with the basal and outer areas pale reddish, the medial two-thirds whitish, defined by fine black lines and with a medial band of irregular black lines and specks; the basal area irrorated with black, the outer area striated with brown. Underside paler; the striæ more prominent, the subapical patch of fore wing more prominent with some black below it.

Hab. Sierra Leone (*Clements*). *Exp.* ♂ 26, ♀ 30 mm. Types in Coll. Schaus and B.M.

- (79)*RHODONEURA XANTHINA, Feld. Reis. Nov. pl. 134. f. 15.
Brazil.

- (80)†RHODONEURA RHOMBOIDEA, Warr. Trans. Ent. Soc. 1889,
p. 262. Brazil.
Siculodes lævigata, Pag. Iris, v. p. 78; Druce, Biol. Centr.-
Am., Het. pl. 59. f. 4.

- (81)†RHODONEURA NITENS, Butl. A. M. N. H. (5) xx. p. 116.
Japan; India; Ceylon; Solomons.
†*Pharambara hamifera*, Moore, Lep. Atk. p. 213.
Microsa marginepunctalis, Leech, Entom. 1880, p. 66, pl. 4.
f. 10.

†*Siculodes ancylosema*, Meyr. Trans. Ent. Soc. 1894, p. 478.

- (82)*RHODONEURA SQUAMIGERA, Pag. Iris, v. p. 72. Natal.

- (83)†RHODONEURA STRIATIVENA, Hmps. Ill. Het. viii. p. 126,
pl. 154. f. 1. S. India; Burma.

- (84)*RHODONEURA ACUTALIS, Wlk. xxxiv. 1523. Mysol.

- (85) RHODONEURA DECORATALIS, Warr. A. M. N. H. (6) xvii.
p. 209. Assam.

- (86) RHODONEURA TAPHIUSALIS, Wlk. xviii. 720.
Singapore; Borneo.
Rhodoneura globulifera, Pag. Iris, v. p. 123.

- (87)†RHODONEURA SPLENDIDA, Butl. A. M. N. H. (5) xx. p. 117.
Assam; Andamans; Solomons.
Pharambara parcipunctalis, Warr. A. M. N. H. (6) xvii. p. 210.

- (88)**RHODONEURA CUPREALIS*, Hmps. Moths Ind. i. p. 361.
Burma.
- (89) *RHODONEURA ALBIFERALIS*, Wlk. xxxiv. 1524.
Batchian ; N. Guinea ; Queensland.
- (90)**RHODONEURA ELONGATALIS*, n. sp.
♂. Head chocolate ; thorax and abdomen pale brown, the latter fuscous towards extremity which is rufous ; wings striated with brown. Fore wing greyish brown, the inner half suffused with purplish ; the costa with numerous dark specks ; a bright red-brown patch extending from before end of cell to outer margin, enclosing a semicircular greyish patch on costa with a white subapical point defined by black ; a rufous band from lower angle of cell to inner margin. Hind wing grey-brown with some fuscous at base ; a medial oblique rufous band ending at anal angle and darker externally ; a subapical black speck and larger spot on margin near anal angle. Underside of fore wing with strong purple suffusion near lower angle of cell.
Hab. Padang Rengas, Malay Peninsula. *Exp.* 24 mm. Type in Coll. Rothschild.
- (91)†*RHODONEURA CUMULALIS*, Wlk. xxvii. 87. Borneo.
†*Siculodes chalcosidera*, Meyr. Trans. Ent. Soc. 1894, p. 478.
- (92)**RHODONEURA POLYCHLORIS*, Pag. Iris, v. p. 108 ; Druce, Biol. Centr.-Am., Het. pl. 59. f. 5. Centr. & S. Am.
- (93)**RHODONEURA ANASTOMOSALIS*, Pag. Iris, v. p. 76 ; Druce, Biol. Centr.-Am., Het. pl. 59. f. 6. Centr. & S. Am.
- (94)**RHODONEURA VIOLALIS*, Pag. Iris, v. p. 69 ; Druce, Biol. Centr.-Am., Het. pl. 59. f. 3. Centr. & S. Am.
- (95)**RHODONEURA PULCHELLOIDES*, Pag. Iris, v. p. 64, pl. 1. f. 4 ; Druce, Biol. Centr.-Am., Het. pl. 59. f. 1. Centr. & S. Am.
- (96) *RHODONEURA IRIAS*, Meyr. Trans. Ent. Soc. 1887, p. 199.
Australia.
- (97) *RHODONEURA PUDICULA*, Guen. Ur. & Phal. ii., *Siculides*, f. 8, & Ann. Soc. Ent. Fr. 1877, p. 288. Celebes.
†*Oscia guttulosa*, Wlk. Journ. Linn. Soc. vi. p. 73.
- (98)**RHODONEURA PERLULA*, Guen. Ur. & Phal. ii., *Siculides*, f. 6, & Ann. Soc. Ent. Fr. 1877, p. 290. Cayenne.
- (99)†*RHODONEURA ACACIUSALIS*, Wlk. xix. 901. W. Africa ;
China ; N. E. India ; Malacca.
Siculodes strigatula, Feld. Reis. Nov. pl. 134. f. 9 (var.).
Rhodoneura minicula, Guen. Ann. Soc. Ent. Fr. 1877, p. 288.
Siculodes sordidula, Plötz, Stett. ent. Zeit. 1880, p. 304, & Pag. Iris, v. pl. 1. f. 8.
,, *rosacea*, Pag. Iris, v. p. 119, pl. 1. f. 3.

(100)*RHODONEURA COMPLICATALIS, Warr. Nov. Zool. ined.

Malacca.

(101) RHODONEURA OBLIQUALIS, Hmps. Moths Ind. i. p. 355.

Sikhim.

(102)†RHODONEURA MARGARITALIS, n. sp.

Pearly white; head and collar fuscous; abdomen slightly tinged with fuscous. Fore wing of male with a tuft of white hair and costal fold at base below; the costal area thickly irrorated with brown to beyond middle; some rufous marks on costa towards apex; seven fairly prominent irregular fine brown lines with other less prominent lines between them, the lines on outer area somewhat reticulated. Hind wing with six or seven fine brown lines, those on outer area somewhat reticulated. Underside of fore wing with the markings on costa cupreous red.

Hab. Madagascar. *Exp.* 40 mm.

(103) RHODONEURA MULTIPUNCTATA, Hmps. Moths Ind. i. p. 356.

N.E. India; Burma; Delagoa Bay.

(104)*RHODONEURA STERNA, Feld. Reis. Nov. pl. 134. f. 13.

S. America.

Siculodes virginula, Guen. Ann. Soc. Ent. Fr. 1877, p. 289.

(105)†RHODONEURA RETICULALIS, Moore, P. Z. S. 1877, p. 616.

Andamans.

(106)†RHODONEURA ANTICALIS, Wlk. xxxiv. 1238.

Burma; Andamans; Borneo; Mysol.

Pyralis puralis, Wlk. xxxiv. 1238.

†*Rhodoneura tetraonalis*, Moore, P. Z. S. 1877, p. 616, pl. 60. f. 10.

(107)†RHODONEURA NÆVINA, Moore, Lep. Atk. p. 212.

Sikhim

Burma.

(108)†RHODONEURA ARGENTALIS, Wlk. xxxiv. 1522.

Bhután

Assam; Ceylon; Java.

Var. *tuberosalis*, Warr. A. M. N. H. (6) xvii. p. 212.

(109) RHODONEURA HYPARGYRA, Hmps. Moths Ind. i. p. 357.

Burma; Borneo.

†*Siculodes mochlias*, Meyr. Trans. Ent. Soc. 1894, p. 479.

(110)†RHODONEURA BASTIALIS, Wlk. xix. 902.

W. & S. Africa;

India; Ceylon; Burma.

Siculodes furcatula, Pag. Iris, v. p. 71, pl. 1. f. 6.

(111)†RHODONEURA POLYGRAPHALIS, Wlk. xxxiv. 1240.

Oriental Region to Solomons & Queensland.

† „ *marmorealis*, Moore, P. Z. S. 1877, p. 617.

† „ *denticulosa*, Moore, Lep. Ceyl. iii. p. 267.

Siculodes rhythmica, Meyr. Trans. Ent. Soc. 1887, p. 201.

(112)†*RHODONEURA CITRINA*, n. sp.

♂. Very pale lemon-yellow; head, thorax, and abdomen slightly marked with fuscous: wings striated with fuscous; fore wing with numerous black specks on the costa, and a slight diffused fuscous patch beyond the cell. Underside of fore wing with a patch of metallic and black scales in the cell and some black scales on veins 6, 7; veins 5, 6, 7 streaked with brilliant pink.

Hab. Pulo Laut (*Doherty*). *Exp.* 26 mm.

Auctorum.

Siculodes eupithecula, Guen. Ann. Soc. Ent. Fr. 1877, p. 291.

Cayenne.

„ *unitula*, Guen. Ann. Soc. Ent. Fr. 1877, p. 292. Brazil.

„ *theorina*, Meyr. Trans. Ent. Soc. 1877, p. 200.

N. Australia.

Rhodoneura notula, Pag. Iris, v. p. 58.

Philippines.

„ *tessellatula*, Pag. Iris, v. p. 58.

Cebu.

Siculodes opalinula, Mab. Ann. Soc. Ent. Fr. 1879, p. 347.

Madagascar.

„ *paullula*, Pag. Iris, v. p. 55, pl. 1. f. 20. Chiriqui.

„ *cuprea*, Pag. Nass. Jahrb. f. Naturf. 1884, p. 117. Amboina.

„ *variabilis*, Pag. Nass. Jahrb. f. Naturf. 1886, p. 64.

New Guinea.

„ *arcuata*, Pag. Iris, v. p. 69.

Chiriqui.

„ *tristriata*, Pag. Iris, v. p. 77.

Monte Video.

„ *vittula*, Guen. Ann. Soc. Ent. Fr. 1877, p. 101. N. China.

„ *politula*, Pag. Iris, v. p. 101.

Philippines.

„ *terreola*, Mab. Ann. Soc. Ent. Belg. 1880, p. 108.

Madagascar.

„ *minutula*, Saalm. Ber. der Senck. Gesells. 1880, p. 295;

Mad. Lep. p. 216. f. 59.

Madagascar.

„ *cenea*, Saalm. Madag. Lep. p. 215.

Madagascar.

„ *mellea*, Saalm. Stett. ent. Zeit. 1881, p. 442, & Madag.

Lep. p. 214, f. 61.

Madagascar.

„ *ochracea*, Pag. Nass. Jahrb. f. Naturf. xxxix. p. 166. Aru.

„ *nullula*, Guen. Ann. Soc. Ent. Fr. 1877, p. 302. Brazil.

„ *triangularis*, Pag. Iris, v. p. 122.

Philippines.

„ *acutipennis*, Pag. Nass. Jahrb. f. Naturf. 1886, 139. Aru.

„ *lucidulina*, Pouj. Bull. Soc. Ent. Fr. 1894, p. 186. Thibet.

„ *papuensis*, Pag. J.B. Nass. Ver. xxxix. p. 166.

Aru.

„ *ritteri*, Pag. Semon's Forschungsreise, v. p. 221, pl. xiii.

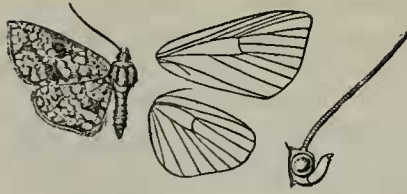
f. 6.

Java.

Genus *PLAGIOSELLA*, nov.

Palpi upturned and reaching vertex of head, the 3rd joint short and porrect; antennæ somewhat thickened; tibiæ hairy. Fore wing with vein 3 from before angle of cell; 4, 5 from angle, 6 from below upper angle; 7, 8 stalked; 9, 10, 11 free. Hind wing with vein 3 from before angle of cell; 4, 5 from angle; 6, 7 from upper angle; 8 approximated to cell close to the end.

Fig. 15.

*Plagiosella clathrata*, ♂. $\frac{3}{2}$.

Type. (1)†*PLAGIOSELLA CLATHRATA*, n. sp.

♂. Head, thorax, and abdomen pale ochreous suffused with rufous; wings pale ochreous strongly reticulated with rufous. Fore wing with rufous discocellular patch; a large patch on middle of inner margin, with an oblique line from it towards apex expanding below apex. Hind wing with rufous patch above middle of inner margin, a small subapical spot and a spot on outer margin near anal angle.

Hab. Aburi, Gold Coast (*Carter*). *Exp.* 20 mm.

(2)†*PLAGIOSELLA INTERRUPTA*, n. sp.

♀. Pale yellow; head, thorax, and abdomen suffused with rufous; wings slightly striated with rufous. Fore wing with the costa and base rufous; a rufous patch at upper angle of cell and band from vein 2 to middle of inner margin; a marginal line. Hind wing with medial rufous band and marginal line.

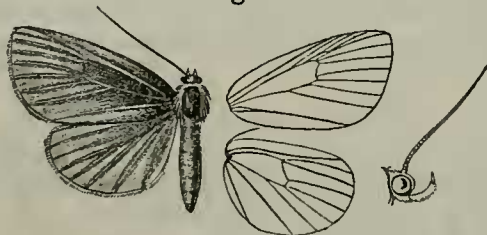
Hab. Madagascar. *Exp.* 20 mm.

Genus *BEGUMA*.

Beguma, Warr. A. M. N. H. (6) xviii. p. 228 (1896).

Palpi upturned and reaching vertex of head, the 2nd joint fringed with scales, the 3rd naked and acuminate; antennæ thickened and flattened. Fore wing with the apex rounded; the outer margin evenly curved; veins 3 and 5 from near angle of cell; 6 from below upper angle; 7 from angle; 8 anastomosing with 9, which is given off from 10 to form an areole. Hind wing with veins 3 and 4 from angle of cell; 5 from above angle; 6, 7 from upper angle; 8 free.

Fig. 16.

*Beguma constellata*, ♂. $\frac{1}{2}$.

Type. **BEGUMA CONSTELLATA*, Warr. A. M. N. H. (6) xviii. p. 228.

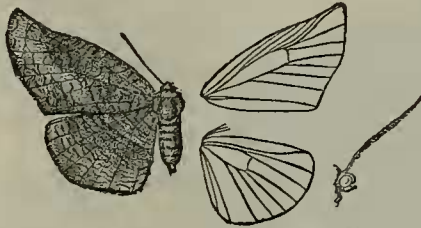
Assam.

Genus CAMPTOCHILUS.

Camptochilus, Hmspn. Moths Ind. i. p. 351 (1892).

Palpi porrect, reaching just beyond the frons; antennæ of female ciliated; tibiæ thick and smoothly scaled. Fore wing with the costa arched to beyond middle, then excised to apex, which is produced upwards; the outer margin obliquely curved; vein 3 from before angle of cell; 4, 5 well separated at origin; 6 from below upper angle; 7, 8 shortly stalked; 9, 10, 11 free, a forked veinlet in cell. Hind wing with veins 3, 4, 5 widely separated at origin; 6, 7 from upper angle; 8 slightly approximated to 7 beyond cell; male with a slight vesicle between veins 1 *a* and *b*.

Fig. 17.



Camptochilus reticulatum, ♀. †. (From Moths Ind. vol. i.)

Type. CAMPTOCHILUS RETICULATUM, Moore, Lep. Atk. p. 233, pl. 8.
f. 3. E. Himalayas; Burma.

Genus HEXERIS.

Hexeris, Grote, Can. Ent. 1875, p. 176.

Ottolenguia, Beuten. Journ. N. York Ent. Soc. iv. p. 146 (1896).

Palpi porrect and straight and extending about twice the length of head, the 2nd joint thickly scaled, the 3rd long and naked; frons with a rounded prominence; antennæ of male with appressed serrations; tibiæ smoothly scaled. Fore wing with the outer margin excurved at middle; vein 3 from before angle of cell; 4, 5 well separated at origin; 6 from below upper angle; 7, 8, 9, 10 from close to angle. Hind wing with the outer margin slightly angled at middle; vein 3 from before angle of cell; 4, 5 well separated at origin; 6, 7 from upper angle; 8 approximated to 7 at end of cell.

Fig. 18.



Hexeris enhydris, ♂. †.

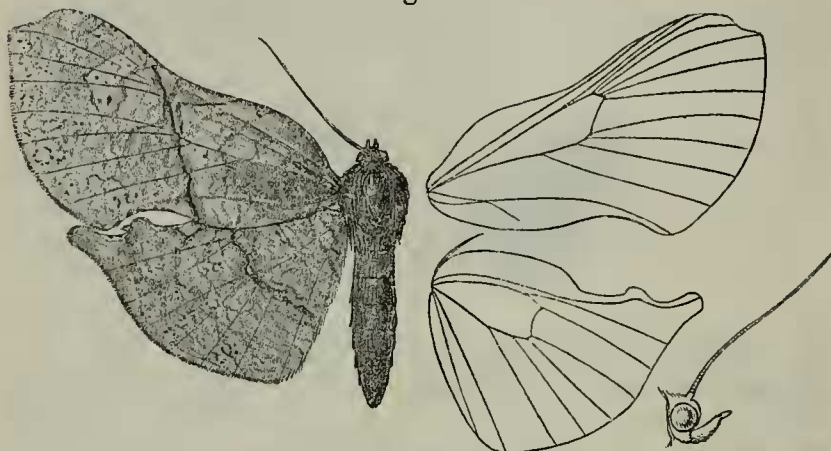
Type. †HEXERIS ENHYDRIS, Grote, Can. Ent. 1875, p. 176. Florida;
Ottolenguia reticulina, Beuten. Journ. N. York California.
Ent. Soc. iv. p. 146.

Genus *HEPIALODES*.

Hepialodes, Guen. Ann. Soc. Ent. Fr. 1877, p. 303.

Palpi porrect, long, slender, and curved downwards; proboscis minute; legs long, the fore tibiæ clothed with long hair. Fore wing broad; the apex truncate; the outer margin produced to a point below apex. Hind wing with the costa excised towards apex, which is produced upwards to a lobe; venation of *Rhodoneura*; hind wing with vein 7 from before angle of cell.

Fig. 19.



Hepialodes follicula, ♂. $\frac{1}{2}$.

Type. **HEPIALODES FOLLICULA*, Guen. Ann. Soc. Ent. Fr. 1877, p. 304,
& Ur. & Phal., Siculides, pl. 1. f. 1. Cayenne.

Genus *BELONOPTERA*.

Belonoptera, H.-S. Aussereur Schmett. p. 76 (1858).

Differs from *Rhodoneura* in the costa of fore wing being somewhat excised at middle and highly arched towards apex, which is falcate; hind wing with the outer margin more or less produced to a point at vein 7.

Fig. 20.



Belonoptera selenioides, ♂. $\frac{1}{2}$.

SECT. I. Hind wing with the outer margin produced to a long point at vein 7.

Type. (1)**BELONOPTERA PHYLLULA*, Guen. Ann. Soc. Ent. Fr. 1877, p. 298; H.-S. Samml. aussereur. Schmett. f. 403. Brazil.

- (2) *BELONOPTERA NERVICULA*, Guen. Ann. Soc. Ent. Fr. 1877,
p. 298, & Ur. & Phal., *Siculides*, f. 2. Brazil.

SECT. II. Hind wing with the outer margin produced to a
slight point at vein 7.

- (3) *BELONOPTERA SELFNIODES*, Pag. Iris, v. p. 83, pl. 1. f. 14.
Paraguay.
- (4)**BELONOPTERA FRONDICULA*, Guen. Ann. Soc. Ent. Fr. 1877,
p. 299. Brazil.
- Siculodes matricula*, Guen. Ur. & Phal. pl. 13. f. 3.

Auctorum.

- Belonoptera patercula*, Pag. Iris, v. p. 94. Brazil.
- „ *fratercula*, Pag. Iris, v. p. 95. California.

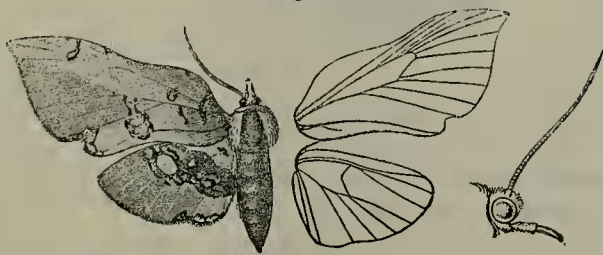
Genus *RISAMA*.

Risama, Wlk. xxxii. p. 519 (1865).

Aziba, Wlk. xxxii. 520.

Proboscis minute; palpi slender, porrect, and extending about the length of head; antennæ simple; tibiæ smoothly scaled. Fore wing with the costa very highly arched near the base, then excised and slightly arched towards apex, which is very produced and acute; veins 3, 4, 5 widely separated at origin; 6 from below upper angle; 7, 8, 9, 10 from near upper angle. Hind wing with vein 3 from before angle of cell; 4, 5 from angle; 6, 7 stalked; 8 approximated to 7 after end of cell.

Fig. 21.



Risama picta, ♂. †.

SECT. I. (*Risama*). Fore wing with the outer angle excised.

Type. (1)†*RISAMA PICTA*, Wlk. xxxii. p. 519.

Siculodes aurorula, Guen. Ann. Soc. Ent. Fr. 1877, p. 294;
H.-S. Samml, aussereur. Schmett. f. 402. Brazil.

SECT. II. (*Aziba*). Fore wing with the outer angle not excised.

(2)†*RISAMA TRANSVERSA*, Wlk. xxxii. 520. Brazil.

- (3)†*RISAMA EURYMENANA*, Wlk. xxxii. 517. Brazil.
 †*Vadata subchalybæa*, Wlk. xxxii. 517.
- (4) *RISAMA RETICULA*, Guen. Ann. Soc. Ent. Fr. 1877, p. 297. Brazil.
- (5) *RISAMA FALCATA*, Feld. Reis. Nov. pl. 134. f. 2. Brazil.
Siculodes serpula, Guen. Ann. Soc. Ent. Fr. 1877, p. 296.
- (6) *RISAMA AVICULA*, Guen. Ann. Soc. Ent. Fr. 1877, p. 293. Tobago; Brazil.
Aziba macropterana, Druce, Biol. Centr.-Am., Het. pl. 59. f. 8
 (nec Wlk.).

Auctorum.

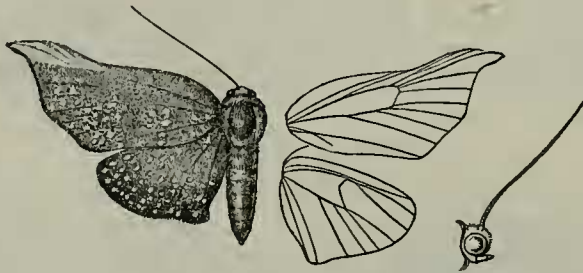
- Siculodes mediula*, Guen. Ann. Soc. Ent. Fr. 1877, p. 295. Brazil.
 „ *straminula*, Pag. Iris, v. p. 92. Brazil.

Genus *VADATA*.

Vadata, Wlk. xxxii. 516 (1865).

Differs from *Risama* in the fore wing being extremely produced at apex; veins 9, 10 stalked; the palpi not reaching beyond the frons.

Fig. 22.



Vadata macropterana, ♂. 1.

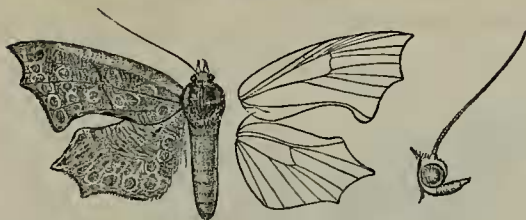
- Type. **VADATA MACROPTERANA*, Wlk. xxxii. 517. Brazil.
Siculodes maculata, Pag. Iris, v. p. 91.

Genus *DRACONIA*.

Draconia, Hübn. Verz. p. 197 (1827).

Palpi porrect, reaching beyond the frons; antennæ almost simple. Fore wing with the costa evenly curved; the apex produced; the outer margin angled at middle and excised towards outer angle, which is hooked; veins 3, 4, 5 well separated at origin; 6 from below upper angle; 7, 8, 9, 10 from near upper angle. Hind wing with veins 3, 4, 5 well separated at origin; 6, 7 from upper angle; 8 approximated to 7 after end of cell.

Fig. 23.

*Draconia annuligera*, ♂. 1.

SECT. I. Hind wing with the apex excised, the outer margin produced to a point at vein 7.

A. Fore wing with the outer margin slightly excised towards outer angle; both wings with the margin crenulate.

Type. (1)**DRACONIA PERIPHETA*, Cram. Pap. Exot. ii. p. 54, pl. 131. f. G; Druce, Biol. Centr.-Am., Het. pl. 59. f. 12. W. Indies; Centr. Am.

B. Fore wing with the outer margin twice excised towards outer angle.

a. Hind wing with the outer margin strongly crenulate.

(2)**DRACONIA MIRABILIS*, Pag. Iris, v. p. 96, pl. 1. f. 10. Peru.

b. Hind wing with the outer margin not crenulate.

(3)**DRACONIA RUSINA*, Druce, Biol. Centr.-Am., Het. p. 188, pl. 59. f. 9. Guatemala.

C. Both wings with the outer margin strongly angled at middle and non-crenulate.

(4)**DRACONIA ANNULIGERA*, Wlk. xxxii. 516. Brazil.

(5)**DRACONIA OLEIGUTTA*, Feld. Reis. Nov. pl. 134. f. 3. Brazil.

SECT. II. Hind wing with the apex not excised and the outer margin not produced to a point at vein 7; fore wing with two excisions towards outer angle; both wings with the margin crenulate.

(6)**DRACONIA DENTICULATA*, Pag. Iris, v. p. 98, pl. 1. f. 12; Druce, Biol. Centr.-Am. pl. 59. f. 10. Centr. Am.; Brazil.

Genus *MESKEA*.

Meskea, Grote, Can. Ent. ix. p. 114 (1877).

Palpi porrect, slight, and hardly reaching to frons; antennæ of male thickened and flattened; tibiæ moderately scaled. Fore wing very long and narrow, the apex rounded; veins 2, 3, 4 from close to angle of cell; 5 from near middle of discocellulars; 6 from below upper angle; 7 from angle; 8, 9 stalked. Hind wing very long and narrow, the apex extremely produced and the outer

margin oblique; vein 3 from near angle of cell; 5 from above angle; 6, 7 from upper angle.

Fig. 24.

*Meskea dyspteraria*, ♂. ♀.

Type. MESKEA DYSPTERARIA, Grote, Can. Ent. ix. p. 115.

Florida.

Genus ADDÆA.

Addæa, Wlk. xxxiv. 1201 (1865).

Mesopempta, Meyr. Trans. Ent. Soc. 1886, p. 217.}

Palpi upturned, thickly scaled and reaching vertex of head; antennæ annulated and minutely ciliated; tibiæ smoothly scaled. Fore wing with the costa nearly straight, the outer margin evenly curved; veins 3, 4, 5 well separated at origin; 6 from below upper angle; 8, 9 stalked. Hind wing with the outer margin evenly curved; vein 3 from before angle of cell; 5 from middle of discocellulars; 6, 7 from upper angle.

Fig. 25.

*Addæa trimeronalis*, ♂. ♀. (From Moths Ind. vol. i.)

(1)†ADDÆA CANDIDALIS, Wlk. xxxiv. 1239. Ceram; Aru;

Pyralis obliquialis, Wlk. xxxiv. 1522. New Guinea.

Siculodes striola, Feld. Reis. Nov. pl. 134. f. 14.

„ *bivittata*, Pag. Nass. Jahrb. f. Naturf. 1886, p. 60.

Type. (2)†ADDÆA SUBTESSELLATA, Wlk. xxxiv. 1201. W. Australia.

(3)†ADDÆA TRIMERONALIS, Wlk. xix. 916. S. India; Ceylon;

†*Mesopempta heliopsamma*, Meyr. Trans. Ent. Soc. 1886, p. 217. New Guinea.

(4)†ADDÆA POLYGRAPHALIS, Wlk. xxxiv. 1245. Borneo; Solomons;

Botys transversalis, Wlk. xxxiv. 1415. W. Australia.

†*Pyralis polyphoralis*, Wlk. xxxiv. 1977.

†*Microsca pusilla*, Butl. A. M. N. H. (5) xx. p. 116.

†*Addæa probolopsis*, Meyr. Trans. Ent. Soc. 1894, p. 477.

(5)†ADDÆA SYNDESMA, Meyr. Trans. Ent. Soc. 1894, p. 478.

Borneo.

Genus MOROVA.

Morova, Wlk. xxxii. 523 (1865).

Palpi porrect, thickly scaled and reaching to the frons, which has a rounded prominence; antennæ of male somewhat thickened; tibiæ smoothly scaled. Fore wing with the costa arched towards apex, the outer margin excurved at middle; veins 3, 4, 5 well separated at origin; 6 from below upper angle; 8, 9 stalked. Hind wing with the outer margin excurved at middle; vein 3 from close to lower angle of cell; 5 from middle of discocellulars; 6, 7 from upper angle.

Fig. 26.



Morova subfasciata, ♂. 1.

Type. †MOROVA SUBFASCIATA, Wlk. xxxii. 523. New Zealand; Fiji.

†*Cacoecia gallicolens*, Butl. Voy. Erebus & Terror, Ins. p. 46.

2. On the Classification of the *Chrysauginæ*, a Subfamily of Moths of the Family *Pyrallidæ*. By Sir GEORGE F. HAMPSON, Bart., F.Z.S.

[Received April 8, 1897.]

The *Chrysauginæ* are a highly specialized subfamily of the true Pyralid group of the large family *Pyrallidæ*, consisting in addition to the present subfamily of the *Epipaschiinæ*, *Endotrichinæ*, and *Pyrallinæ*, lately classified by me in the 'Transactions' of the Entomological Society, and characterized by vein 7 of the fore wing being stalked with 8, 9. The *Chrysauginæ* as here defined are primarily distinguished from their allies by the abortion of the maxillary palpi, which are well developed in almost all other *Pyrallidæ*. They are closely allied to the *Endotrichinæ* but, as vein 8 of the hind wings is in rare instances free, were probably derived directly from the *Pyrallinæ* as a parallel development to the *Endotrichinæ*. The latter are almost confined to the Old World, though a few species are found in the Nearctic region, and one genus in the W. Indies; whilst the *Chrysauginæ* are almost exclusively *Neotropical*, a few genera and species being found in the Southern States, and a few others spreading through the Australian region to the Malayan subregion, the furthest points reached being Burma and Assam.

The subfamily is remarkable for the great sexual diversity found in the subcostal neuration of the fore wing in a large proportion of the species, the females always having veins 7, 8, 9 stalked, as